

Date: 09/04/02

Batch No: 111323

Supplier: Magna

Dart P/O: 8479

Packing Slip: Yes ☐ No ☐  
Invoice: Yes ☐ No ☐  
Receipt: Cash ☐ Cr ☐

Release Note Attached: Yes ☒ No ☐ N/A ☐  
Waybill Attached: Yes ☒ No ☐ N/A ☐  
Shipment Complete: Yes ☒ No ☐ N/A ☐  
QC6 Inspection SA 09/04/02 N/A ☐  
Work Order                      N/A ☐

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments
B/o	See					
	Packing list					

Initials of receiver (if shipment OK) Level 12

Production/Admin:

Date

Received/Costing

Initial

09/04/02  
912 10637  
CS

Location

8479/04/02

**Magna Stainless**

5775 Kieran St, Saint-Laurent QC H4S 0A3  
Phone: (514) 339-1211 Watts: 1-800-363-6646 Fax: (514) 339-1105

**INVOICE**

Pg 1 of 1 I009104

**SOLD TO:**

DART AEROSPACE LTD  
1270 ABERDEEN STREET  
HAWKESBURY , ON  
K6A 1K7

**SHIP TO:**

DART AEROSPACE LTD  
1270 ABERDEEN STREET  
HAWKESBURY , ON  
K6A 1K7

MTR:Y

INVOICE DATE:	04/02/09
ORDER DATE:	04/01/09
SHIP DATE:	04/02/09
ORDER NUMBER:	W010139
PURCHASE ORDER:	8479

Currency	Sales Person	Ship Via	F.O.B.	Terms
CANADIAN DOLLARS	ERYCK BLAIS	NIR:R-557065-1	PREPAID	NET 30 DAYS

Ln	Back Ordered	Ordered	Unit	Description	Shipped	Price Per	Value
STAINLESS ROUNDS							
		1	PC	SRB 304 3/8" x R/L	1 PC	12.00	<u>CZ</u> 12.00
				L021850 13'5" 1 PC/6 LB			
		1	PC	SRB 304 1/2" x R/L	1 PC	24.00	<u>CZ</u> 24.00
				L020290 12'1" 1 PC/8 LB			
		1	PC	SRB 304 3/4" x R/L	1 PC	52.00	<u>CZ</u> 52.00
				L022515 12'1" 1 PC/18 LB			
		10	PC	SRB 303 3/4" x R/L	10 PC	55.00	<u>CZ</u> 550.00
				L022546 12'1" 10 PC/184 LB			
STAINLESS SHEET							
		8	PC	SSH 304 2B 16ga x 48" x 96"	8 PC	170.00	1,360.00
				L023370 8 PC/672 LB			

RECEIVED APR 09 2009

04/03/09 11:34:27

Merchandise:	1,998.00
Surcharges:	
No Tax Costs:	
GST	99.90
Total Due:	2,097.90

Title to the goods sent out on this invoice remains with Magna Stainless Div of CSM ULC until such time as this invoice has been paid in full. Unless otherwise noted terms are 30 days. Interest accrues on all overdue accounts at the rate of 1.5% per month compounded monthly.

Q.S.T. # 1213236471  
G.S.T. # 881565899 RT0001



# Magna Stainless

5775 Kieran St, Saint-Laurent, Quebec H4S 0A3  
Phone: (514) 339-1211 Watts: 1-800-363-6646 Fax: (514) 339-1105

## PACKING LIST

I009104

Page: 1 of 1

SOLD TO:  
DART AEROSPACE LTD  
1270 ABERDEEN STREET

SHIP TO:  
DART AEROSPACE LTD  
1270 ABERDEEN STREET

HAWKESBURY, ON  
K6A 1K7  
Contact: CHANTAL

HAWKESBURY, ON  
K6A 1K7  
Ship Terms: PREPAID

STOCK

MTR:Y 2

Currency		Sales Person		Customer Phone	Customer Fax	Customer PO		
CANADIAN DOLLARS		ERYCK BLAIS		(613) 632-5200	(613) 632-1053	8479		
Sales Order	Terms			Ship Via		Date Ordered	Date Required	Date Shipped
W010139	NET 30 DAYS			NIR:R-557065-1		04/01/09	04/02/09	04/02/09

Ordered	Back Ordered	Unit	Description	Bundle #	Heat #	Shipped
1		PC	STAINLESS ROUNDS SRB 304 3/8" x R/L ✓			1
1		PC	SRB 304 1/2" x R/L ✓ 13'5" 6 LB / 1 PC	L021850	16750	1
1		PC	SRB 304 3/4" x R/L ✓ 12'1" 8 LB / 1 PC	L020290	16162	1
10		PC	SRB 303 3/4" x R/L ✓ 12'1" 18 LB / 1 PC	L022515	246611	1
			12'1" 184 LB / 10 PC	L022546	422249	10
8		PC	STAINLESS SHEET SSH 304 2B 16ga x 48" x 96" 672 LB / 8 PC	L023370	SC19200	8
Total Weight:						888 LB

Skids: 1

Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Signature: \_\_\_\_\_

# Dart Aerospace Ltd

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawksbury, Ontario K6A 1K7  
Phone: (613) 632-3336  
Fax: (613) 632-4443

## Receiving Slip

Date Apr 2, 2009	Page 1
Receipt Number RCP00010637	

### Purchase From:

Magna Stainless  
5775 rue Kieran  
St Laurent, Quebec H4S 0A3  
Canada

### Ship To:

Main Finished Goods Location  
Dart Aerospace Ltd  
1270 Aberdeen St  
Hawksbury, Ontario K6A 1K7

Reference	Description	Contact	Vendor Number	PO Number
			VC-MAG002	PO00008479

Vendor Item Number	Item Number	Description	Qty. Received	UOM	Unit Cost	Extended Cost	Arrival Date
	M303R0750	303 Round Bar 0.750 (NOTE: AISI 304/316 NOT ACCEPTABLE) MATERIAL: AISI 303 ROUND BAR B/N111323	121.0000	f	4.583333	CZ 554.58	Apr 02, 2009
	M304R0375	304 ROUND BAR 0.375 (NOTE: AISI 303 NOT ACCEPTABLE) MATERIAL: AISI 304/316 STAINLESS STEEL ROD B/N111323	13.0416	f	1.000000	CZ 13.04	Apr 02, 2009
	M304R500	304 SS roundbar .500 AS ABOVE B/N111323	12.0083	f	2.000000	CZ 24.02	Apr 02, 2009
	M304R0750	304 SS Roundbar .750 AS ABOVE B/N111323	12.0083	f	4.333333	CZ 52.04	Apr 02, 2009
	M304S16GA	304/316 Sheet .063 2B FINISH MATERIAL: AISI 304/316 AS PER 5513 OR 5524 B/N111323	256.0000	sf	5.312500	1,360.00	Apr 02, 2009

Comments:

# DART

## Purchase Order

Date Apr 01, 2009	Page 1
Purchase Order Number PO00008479	

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawksbury, Ontario K6A 1K7  
Phone: (613)632-9577  
Fax: (613)632-1053

**FIXED**  
6/26/09

### Vendor Address:

Magna Stainless  
5775 rue Kieran  
St Laurent, Quebec H4S 0A3  
Canada  
Phone (514) 339-1211  
Fax (514) 339-1105

### Ship To:

Main Finished Goods Location  
Dart Aerospace Ltd  
1270 Aberdeen St  
Hawksbury, Ontario K6A 1K7

Reference	Contact	Vendor Number	PO Date	Terms	Ship Via	Expected Arrival
		VC-MAG002	Apr 01, 2009	N30	yours	Apr 09, 2009

Qty. Ordered	Item Number	Description	Expected Arrival	Drop-Ship	Unit Cost	UOM	Extended Price
144.0000	M2024T3S040 ✓	2024-T3 .040 sheet Comments: MATERIAL: 2024-T3 ALUMINUM SHEET PER AMS-QQ-A-250/4 OR AMS 4037	09/04/2009	No	4.479166	sf	645.00
96.0000	M2024T3S050 ✓	2024-T3 .050 sheet Comments: AS ABOVE	09/04/2009	No	5.520800	sf	530.00
120.0000	M303R0750 ✓ used 121ft	303 Round Bar 0.750 Comments: MATERIAL: AISI 303 ROUND BAR (NOTE: AISI 304/316 NOT ACCEPTABLE)	09/04/2009	No	4.583333	f	550.00
12.0000	M304B0375X03000 ✓	M304 SS bar .375 x 3.00 Comments: MATERIAL: 304/316 STAINLESS STEEL BAR (NOTE: AISI 303 NOT ACCEPTABLE)	09/04/2009	No	12.083333	f	145.00
12.0000	M304R0375 ✓ used 13.0416ft	304 ROUND BAR 0.375 Comments: MATERIAL: AISI 304/316 STAINLESS STEEL ROD (NOTE: AISI 303 NOT ACCEPTABLE)	09/04/2009	No	1.000000	f	12.00
12.0000	M304R500 ✓ used 12.00833	304 SS roundbar .500 Comments: AS ABOVE	09/04/2009	No	2.000000	f	24.00
12.0000	M304R0750 ✓ used 12.00833	304 SS Roundbar .750 Comments: AS ABOVE	09/04/2009	No	4.333333	f	52.00
256.0000	M304S16GA	304/316 Sheet .063 Comments: MATERIAL: AISI 304/316 AS PER 5513 OR 5524 2B FINISH	09/04/2009	No	5.312500	sf	1,360.00

Comments:

Tax Summary:  
GST  
ONTPST

165.90  
0.00

Less:  
included tax

0.00

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY

Entered By: CLAVOIE

Approved By:

Subtotal

3,318.00

Total tax

165.90

Total purchase order in

CAD Dollars

3,483.90

1018854

## POSCO Mill Test Certificate/검사증명서

Certificate No./증명서번호:081027-PRSE-018-002  
 Date of Issue/발행일자:Oct. 30, 2008  
 Surface Finish/표면마무리:NO.2B

Order No./계약번호:0003445692

PO No./주문번호:3445692

Supplier/주문자:DAE WOO INTERNATIONAL CORP.

Commodity/품명:STAINLESS COLD ROLLED COIL

Customer/고객사:MAGNA STAINLESS INC.

Spec &amp; Type/규격:ASTM-A240-304

Spec & Type: AS11M-A240-304

Size/치수	Product No. 제품번호	Quantity 수량	Weight 중량 (kg)	Heat No. 재간번호	POSITION	Tensile/인장시험			Hard- ness /경도 HRB		DIVISION	Chemical Composition/화합성분(%)										
						YS 0.2% (MPa)	TS (%)	EL (%)				C	Si	Mn	P	S	Cr	Ni	Cu	Mo	N	
												-4	-3	-3	-4	-4	-2	-2	-3	-2	-4	
1.50x1219xC	QEJ1008B	1	5,942	SC19200	T	281	636	56	83.8		L	558	410	1040	320	38	1811	806	330	11	372	
					B	285	644	55	85.2													
1.50x1219xC	QEJ1008C	1	5,942	SC19200	T	281	636	56	83.8		L	558	410	1040	320	38	1811	806	330	11	372	
					B	285	644	55	85.2													
*** Sub Total (040) ***			3			17,836 (kg)																
1.85x1524xC	QBK0071A	1	5,477	SC18952	T	273	616	57	83.5		L	542	380	1060	310	74	1824	806	340	13	406	
					B	268	611	57	82.1													
1.85x1524xC	QBK0071B	1	5,477	SC18952	T	273	616	57	83.5		L	542	380	1060	310	74	1824	806	340	13	406	
					B	268	611	57	82.1													
1.85x1524xC	QBK0071C	1	5,487	SC18952	T	273	616	57	83.5		L	542	380	1060	310	74	1824	806	340	13	406	
					B	268	611	57	82.1													
*** Sub Total (050) ***			3			16,441 (kg)																
1.85x1219xC	QEJ0899A	1	5,347	SE38866	T	299	636	55	87.8		L	583	437	1095	321	36	1816	802	401	13	350	
					B	290	630	56	86.3													
1.85x1219xC	QEJ0899B	1	5,347	SE38866	T	299	636	55	87.8		L	583	437	1095	321	36	1816	802	401	13	350	
					B	290	630	56	86.3													
1.85x1219xC	QEJ0899C	1	5,208	SE38866	T	299	636	55	87.8		L	583	437	1095	321	36	1816	802	401	13	350	
					B	290	630	56	86.3													
*** Sub Total (060) ***			3			15,902 (kg)																

\* Position - T : Top, M : Middle, B : Bottom  
 \* Tensile Test. Direction : Transversal, Gauge Length : 50mm(Rectangular),  
 YP Method : 0.2% off-set  
 \* Division - L:Ladle Analysis  
 \* Chemical Composition Unit : -2:x1/100, -3:x1/1000, -4:x1/10000, -5:x1/100000  
 \* Tr : It is within the standard range(<0.008%) and include trace element.

We hereby certify that the material herein has been made in accordance with the order and specification.

ORIGINAL

Test Certificate is issued according to EN10204 3.1B.  
 \* This Mill Test Certificate cannot be copied for any purpose.

Surveyor To:

POSCO Pohang Works, 5 Dongchon-dong, Nam-gu, Pohang-si, Gyeongsangbuk-do, 790-785, Korea

Chief of material testing section Jo, Won Gook

3  
0910 4102

10 IMPERIAL CHAMBERS, FIRST FLOOR,  
WILSON ROAD BALLARD ESTATE MUMBAI  
400 038 INDIA

**CUSTOMER :**

MAGNA STAINLESS INC (DIV OF CANADIAN  
SPECIALTY METALS INC.)  
525 MELOCHE AVE. DORVAL  
QUEBEC CANADA H9P 2W2

**INSPECTION CERTIFICATE**

ORDER NO .  
075646-AD1

PACKING LIST NO. INSPECTION NO  
IMP/100885 IMP/100885/5

DATE  
22/09/2008

BUNDLE NO .

2715614,2715623,2715684,2715685,2715686,2715719,2715728,2715750

GRADE  
T-304

**DESCRIPTION :**

STAINLESS STEEL BRIGHT BARS L/C NO.: I700298 DT.: 26/09/2008

**COLD DRAWN POLISHED**

SIZE (INC)	SHAPE	TOLERANCE	LENGTH (FT)	PIECES	WEIGHT (LBS)
1/2	ROUND	ASTM A484	12' R/L	1083	8870

**CHEMICAL ANALYSIS**

HEAT NO. 16162

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N	Co
0.031	1.44	0.41	0.020	0.033	8.06	18.20	0.27	0.50	0.052	0.12

**TEST RESULT**

.2% YIELD STRENGTH KSI	TENSILE STRENGTH KSI	ELONGATION %	REDUCTION OF AREA %	HARDNESS BHN	GRAIN SIZE
93	109	42	72	221	7

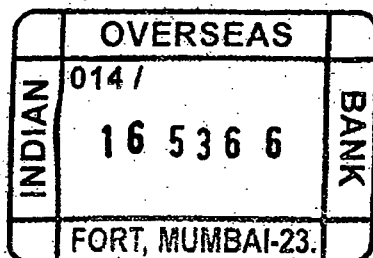
**Specification :**

MATERIAL CONFIRMS TO ASTM A276-06 COND "A" TYPE 304, ASTM A 262-02A PRACTICE E, ASTM E 112-88(GRAIN SIZE). CERTIFICATION AS PER EN 10204-3.1.

**Remarks :**

MATERIAL IS FREE MERCURY CONTAMINATION, FREE FROM WELD OR WELD REPAIRS, MINIMUM SOLUTION ANNEALING TEMPERATURE IS 1050 DEGREE  
CENTIGRADE. SOAKING TIME: 1 HR / INCH. WATER QUINCHED. MICRO: FREE FROM CONTINUOUS CARBIDE NETWORK ON GRAIN BOUNDARIES, MACRO: GOOD.  
COUNTRY OF ORIGIN: INDIA

We hereby certified that the material described above has been tested and complies with the terms of order/contract.



*Suvarna*  
WORKS INSPECTOR  
S. SUVARNA

07/04/02

2017340

# Acciaierie Valbruna S.p.A.



**CERTIFICATO DI COLLAUDO**  
**ABNAHMEPRUEFZEUGNIS**  
**INSPECTION CERTIFICATE**  
**CERTIFICAT DE RECEPTION**  
**EN 10204 (2005) , 3.1**

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.  
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Cliente / Besteller/Purchaser/Cliant  
**VALBRUNA CANADA LTD**  
8724 HOLGATE CRESCENT  
CDN-MILTON, ONT L5T 5Z1-CAN

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**  
Hersteller/Item/Usine productrice

Avviso di Spedizione: D-VI08026527  
Lidortanzogo/Packung list/B.L.

Ordine nr: 809002025 STOCK  
Bestell/Your order/Commande

Certificato nr: MEST680179/2008/  
Prüfung/Test/Essai

Conferma ordine nr: EI08011083  
Works/Our Order/Ref. n.

Marchio di Fabbrica:  
Zeichen des Werksachverständigen  
Trade mark  
Sigle de fusine productrice



Oggetto Prove: - Annealed Cold Drawn  
Prüfgegenstand/Item Inspected/Finissage

Tipo di Elaborazione: E+AOD  
Einschmelzungsmelting process/Mode d'elaboration

Punzone del Collaudatore:  
Stempel des Werksachverständigen  
Inspector's stamp/Poinçon de l'essayeur

Specifiche:  
Anforderungen / Requirements / Exigences  
**VAL CANADA 2 303 A,CF**  
**ASTM A314 97 S30300**  
**DOD-F-24669 6 S30300**  
**(0) SEC.II PT.A 2007 EDITION**

**AMS 5640 U TYPE1**  
**ASTM A320 2008 B8F**  
**MIL-S-862 B/1 303**

**ASME SA320 2007 B8F (0)**  
**ASTM A582 2005 S30300**  
**QQ-S-764 B/2 303**

Qualità: T-303  
Werkstoff/Grade/Qualité

Marca: MV188ZHS MAXIVAL  
Markenbezeichnung/Brand/Qualité

Punzonatura: T-303  
Kennzeichnung/Marking/Marque

Pos. nr. Pos. nr. Item nr. Nr. de poste	Oggetto Gegenstand Product description Descrip. du produit	Dimensioni - In Abmessungen Dimension Dimension	Tolleranza Tolerance Tolérance	Lunghezza - Fl Länge Length Longueur	Colata Schmelze Melt Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Losn. Lot nr. Lot nr.
0130	Round	0,7500	484-06B	12 / 12	422249		6.190	818400620

Sono state soddisfatte tutte le condizioni richieste  
Die gestellten Anforderungen sind in Anlage erfüllt  
The material has been furnished in accordance with the requirements  
Le matériel a été fourni conforme aux exigences

Controllo antimescolanza: OK  
Verwechslungsprüfung: spektralanalytisch durchgeführt  
Antimixing testing performed: OK  
Contrôle antimesclange fait: T.B.S.

Controllo visivo e dimensionale: soddisfatta le esigenze:  
Besichtigung und Ausmessung: ohne Beanstandung  
Visual inspection and dimensional checks:satisfactory  
Contrôle visuel et dimensions: satisfaisant

TEST	Provetta/Probes Specimen/Provette Lap Oak Stress Bridle Oak Stress With Oak Thickness Lap Oak Stress mm	Posiz. Saggio Position Position	Snervamento Stressgrenze Yield Stress Limite élastique Rp 0,2% k.s.i.	Snervamento Stressgrenze Yield Stress Limite élastique	Resistenza Zugfestigkeit Tensile strength Resistance à traction Rm k.s.i.	Allungamento Bruchdehnung Elongation Allongement E 4d %	Strizione Einschnürung Reduction of area Striction RA %	Resilienza Kerzschlagwert Impact Value Resilience	Durezza Härte Hardness Dureté HB
Valori richiesti 1 Anforderungen/Required values Valeurs demandées		min max	30	-	75	-	35	-	140 241
A	12,5	68 L	67		99	42	53		237

1) L=longitudinale/longs, Q=transversale/quers, T=Tangenziale/tangentiel

## Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata Heat Schmelze/Coulée	min - max 0,150	1,00	2,00	17,00 19,00	0,60	1,00	8,00 10,00	-	0,15 0,40	0,15 0,40	-	-	-	-	-
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %					
422249	0,037	0,43	1,89	17,34	0,56	0,55	8,35	0,076	0,03	0,32					

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1940°F for 0,5 h/water.

Micro and macro etch test: OK

Material is DFARS Compliant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury or radio-activity contamination  
The Quality Management System is Certified acc. Pressure Equipment Directive [97/23/EC] Annex 1, s. 4.3 by TUEV and LLOYD'S

SA 09/02/04

Vicenza, 09/10/08  
VCO008  
(Mod. MCEP)

Il collaudatore di stabilimento / der Werkssachverständiger / Works inspector / L'agent d'usine

M. Rizzotto

Pagina - 1 di 1



**VIRAJ PROFILES LIMITED**

10 IMPERIAL CHAMBERS, 1ST FLOOR,  
WILSON ROAD, BALLARD ESTATE,  
MUMBAI - 400038 INDIA

**TEST CERTIFICATE****CUSTOMER :**

ORDER NO.  
P00899

PACKING  
LIST NO.  
IMP/101282

INSPECTION NO  
IMP/101282/13

DATE  
21/11/2008

BUNDLE NO.  
2035235,2035249,2035286

GRADE  
304/304L

DESCRIPTION :  
STAINLESS STEEL BRIGHT BARS

**SMOOTH TURNED**

SIZE (INC)	SHAPE	TOLERANCE	LENGTH (FT)	PIECES	WEIGHT (LBS)
3/8	ROUND	ASTM A484	12' - 14'	962	4822

**CHEMICAL ANALYSIS**

HEAT NO.	16750										
C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N	Co	
0.019	1.46	0.42	0.021	0.032	8.10	18.16	0.34	0.42	0.084	0.14	

**TEST RESULT**

.2% YIELD STRENGTH KSI	TENSILE STRENGTH KSI	ELONGATION %	REDUCTION OF AREA %	HARDNESS BHN	GRAIN SIZE
128	137	42	71	221	7

**Specification :**

MATERIAL CONFIRMS TO ASTM A182/A-182M-06, A276-06 COND A, A479/A479M-06a COND A, A193/A193M-08a B8 CL-1, A320/A320M-05a B8 CL-1, A484 06b, A388/A388M 05, ASME SA182-04, SA479-04, SA 193-04 B8 CL-1, SA320-04 B8 CL-1, IGC SATISFACTORY AS PER ASTM A 262-02a PRACTICE E AMS 5639G, QQ-S-783F, NACE-MR-017, 2002, AISI 304/304L UNS#S30400/S30403. CERTIFICATION AS PER EN 10204-3.1B.

**Remarks :**

MATERIAL IS FREE FROM MERCURY CONTAMINATION, FREE FROM WELD WELD REPAIRS, MICRO: FREE FROM CONTINUOUS CARBIDE NETWORK ON GRAIN BOUNDARIES, MACRO: GOOD, MINIMUM SOLUTION ANNEALING TEMPERATURE 1050C, SOAKING TIME 1/2 HRS, WATER QUENCHED. COUNTRY OF ORIGIN: INDIA.

We hereby certified that the material described above has been tested and complies with the terms of order/contract.

WORKS INSPECTOR

S. SUVARNA

FBP  
000580

# Acciaierie Valbruna S.p.A.



**CERTIFICATO DI COLLAUDO**  
**ABNAHMEPRUEFZEUGNIS**  
**INSPECTION CERTIFICATE**  
**CERTIFICAT DE RECEPTION**  
**EN 10204 (2005), 3.1**

36100 VICENZA (Italia) - Viale della scienza, 25 z.l.  
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Cliente / Besteller/Käufer/Klient  
**VALBRUNA CANADA LTD**  
8724 HOLGATE CRESCENT  
CDN-MILTON, ONT L5T 5Z1-CAN

Avviso di Spedizione: D-VI08011919  
Lieferanzeige/Packing list/B.L.

Certificato nr: MEST622937/2008/  
Prüfung/Test/Essai

Produttore: **ACCIAIERIE VALBRUNA S.P.A.**  
Hersteller/Item/Usine productrice

Ordine nr: 804001958 STOCK  
Bestell/Your order/Commande

Conferma ordine nr: E108003473  
Werkz/Our Order/Ref nr.

Oggetto Prove: - Annealed Cold Drawn  
Prüfgegenstand/Item Inspected/Finissage

Tipo di Elaborazione: E+AOD  
Erbschmelzungsart/Melting process/Mode d'elaboration

Marchio di Fabbrica:  
Zeichen des Lieferwerkes  
Trade mark  
Sigle de l'usine productrice



Punzone del Collaudatore:  
Stempel des Werkssachverständigen  
Inspector's stamp/Pointon de l'essayeur

Specifiche:  
Anforderungen / Requirements / Exigences

VAL CANADA 2 304/304L A,CF  
ASME SA182 2007 S30400/03 0  
ASME SA479 2007 S30400/03 3  
ASTM A262 2002A PRACTICE E  
ASTM A320 2007A B8  
NACE MR0175\* 2003 S30400/03 A 5  
(0) SEC.II PT.A 2007 EDITION  
(1) SEC.II PT.A 2007 EDITION  
(3) SEC.II PT.A 2007 EDITION  
(5) \* ISO 15156-3

AMS 5639 H S30400  
ASME SA193 2007 B8 1  
ASTM A182 2007A S30400/03 4  
ASTM A276 2006 S30400/03  
ASTM A479 2006A S30400/03  
QQ-S-763 F 304/304L

AMS 5647 H S30403  
ASME SA320 2007 B8 (2)  
ASTM A193 2007 B8  
ASTM A314 97 S30400/03  
MIL-S-862 B/1 304/304L

0Chemical analysis only.  
2SEC.II PT.A 2007 EDITION  
4Chemical analysis only.

Qualità: T-304L  
Werkstoff/Grade/Qualité

Marca: MVAISL MAXIVAL  
Markenbezeichnung/Brand/Numéro

Punzonatura: T-304L  
Kennzeichnung/Marking/Marquage

Pos. nr. Pos. nr. Item nr. Nr. de poste	Oggetto Gegenstand Product description Descript. du produit	Dimensioni - In Abmessungen Dimension Dimension	Tolleranza Toleranz Allowance Tolerance	Lunghezza - Fi Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Losnr. Lot nr. Lot nr.
0120	Round	~0,7500	484-06B	12 / 12	246611		9.827	804600860

Sono state soddisfatte tutte le condizioni richieste  
Die gestellten Anforderungen sind lt. Anlage erfüllt  
The material has been furnished in accordance with the requirements  
Le matériel a été trouvé conforme aux exigences

Controllo antimescolanza: OK  
Verwechslungsprüfung: spektralanalytisch durchgeführt  
Antimixing testing performed: OK  
Contrôle antimeslange fait: s.a.s.

Controllo visivo e dimensionale: soddisfa le esigenze:  
Besichtigung und Ausmessung: ohne Beanstandung  
Visual inspection and dimensional checks: satisfactory  
Contrôle visuel et dimension: satisfaisant

TEST	Provetta/Probessab Specimen/Eprouvette Long diam. Spec. Breite Diam. Diale With Diam. Thickness Larg. diam. épais mm	°F	Poelt. Saggio Proben Essai 1)	Snervamento Streckgrenze Yield Stress Limite élastique Rp 0,2% k.s.i.	Snervamento Streckgrenze Yield Stress Limite élastique	Resistenza Zugfestigkeit Tensile strength Resistance à traction Rm k.s.i.	Allungamento Bruchdehnung Elongation Allongement E 4d %	Strizione Einschnürung Reduction of area Section RA %	Resilienza Kerbschlagenergie Impact Value Resilience	Durezza Härte Hardness Dureté HB 1/2 r
	Valori richiesti 1 Anforderungen/Required values Valeurs demandées	min max		30	-	75	40	50	-	140 235
A	12,5	68	L	64		100	47	68		228

Grain size for ASTM E112

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1/L=longitudinale/längs, Q=transversale/quer, T=Tangenziale/tangential

## Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata / Heat Schmelze/Coulée	min - max 0,030	1,00	2,00	18,00 20,00	1,00	1,00	8,00 10,50	0,040	0,030	0,100	-	-	-	-
C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %	N %	-	-	-	-
246611	0,022	0,58	1,81	18,25	0,45	0,40	8,10	0,100	0,030	0,030	0,081			

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1940°F for 0.5 h/water.

Micro and macro etch test: OK

Intergranular corrosion test per ASTM A262 pract. E: ok.

Material is DFARS Compliant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury or radio-activity contamination  
The Quality Management System is Certified acc. Pressure Equipment Directive [97/23/EC] Annex 1, s. 4.3 by TÜV and LLOYD'S

Vicenza, 29/04/08

VCO08  
(Mod. MCER)

Il collaudatore di stabilimento / der Werkssachverständige / Works inspector / L'agent d'usine

M. Rizzotto

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SD 09/02/04